

ABSTRACT OF THE DISCLOSURE

5 An optical fiber comprises a core region, an inner cladding region, and an outer cladding region. Each of the core region and inner cladding region is doped with GeO_2 , whereas the inner cladding region is also doped with Fe element. The core region has a refractive index higher than each of the refractive index of the inner cladding region and the refractive index of the outer cladding region. Each of the core region and inner cladding region doped with GeO_2 has a UV photosensitivity. The deviation in concentration distribution of GeO_2 added to the inner cladding region is so small that the deviation in UV photosensitivity in the inner cladding region is $\pm 10\%$ or less.